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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,261	10/03/2003	Kazuyuki Matsumura	2003-1401A	8746
513 7590 11/01/2007 WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			EXAMINER PHAM, TAMMY T	
			ART UNIT 2629	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/677,261

Applicant(s)

MATSUMURA ET AL.

Examiner

Tammy Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application |
| 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 31 August 2007 has been entered.

Response to Amendment

2. Claims 1-35 have been cancelled. Independent claims 36, 58, 66, have been amended. Claims 36-69 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 36-45, 47-50, 52, 54-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over TANIGUCHI (Japanese Publication No: 2000-331557) in view of MIZUNO (Japanese Publication No: 2000-329577) and ERICSSON (US Patent No: 6,130,665).

4. **As for independent claim 36**, TANIGUCHI teaches of a display apparatus (Fig. 1) comprising: a transmission type display portion (TANIGUCHI, Fig. 1, item 2) that is operable to

transmit light there through, the transmission type display portion (TANIGUCHI, Fig. 1, item 2) having a touch panel (TANIGUCHI, Fig. 1, item 2) function, and the transmission type display portion (TANIGUCHI, Fig. 1, item 2); a rearward display portion (TANIGUCHI, Fig. 1, item 3) mounted rearwardly of the transmission type display portion (TANIGUCHI, Fig. 1, item 2) such that the rearward display portion (TANIGUCHI, Fig. 1, item 3) can be seen through the transmission type display portion (TANIGUCHI, Fig. 1, item 2) by a viewer; and a control portion for controlling the transmission type display portion (TANIGUCHI, Fig. 1, item 2) and the rearward display portion (TANIGUCHI, Fig. 1, item 3) in response to finger approach toward or finger touch of the transmission type display portion (TANIGUCHI, Fig. 1, item 2) in section [0011] and Fig. 1.

5. TANIGUCHI fails to teach of a vehicle mounted display system.
6. MIZUNO teaches of a vehicle mounted display system in section [0004].
7. It would have been obvious to one with ordinary skill in the art at the time the invention was made to mount the display system of TANIGUCHI in a vehicle as taught by MIZUNO in order to prevent useful information from being obstructed by an operation guide screen (see MIZUNO: Abstract).
8. TANIGUCHI fails to teach that the touch panel is able to display images.
9. ERICSSON teaches that the touch panel (Fig. 4, item 30) is able to display images (column 4, lines 40-43).
10. It would have been obvious to one with ordinary skill in the art at the time the invention was made to replace the touch panel of TANIGUCHI with the touch panel with displayed images

of ERICSSON in order to allow for simultaneous input and display of textual information (see ERICSSON: column 1, lines 53-55).

11. **As for independent claim 58**, in addition to claim limitation of claim 36 above, TANIGUCHI further teaches that that a rearward display portion (TANIGUCHI, Fig. 1, item 3) positioned so as to be spaced rearwardly of the transmission type display portion (TANIGUCHI, Fig. 1, item 2) such that a display of the rearward display portion (TANIGUCHI, Fig. 1, item 3) can be provided to a rearward part of the transmission type display portion (TANIGUCHI, Fig. 1, item 2) in Fig. 1.

12. **As for independent claim 66**, in addition to claim limitation of claims 36 and 56 above, TANIGUCHI teaches of a display apparatus (Fig. 1), comprising: a transmission type display portion (Fig. 1, item 2) mounted at a forward position in the vehicle, a rearward display portion (Fig. 1, item 3) mounted rearward of the transmission type display portion and spaced apart from the transmission type display portion (Fig. 1, item 2), the rearward display portion being operable to form a display; a display control portion operable to display a switch operation guide in the transmission type display portion; a touch detecting portion provided in transmission type display portion for detecting a position touched by an operator; and an operation signal output portion for outputting an operation signal indicating an operation content based on a display state of the display control portion and a touch detection output from the touch detecting portion; wherein the transmission type display portion (Fig. 1, item 2) is operable in response to finger approach toward or finger touch of the transmission type

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display portion (Fig. 1, item 2) so as to function as a touch panel and cover the rearward display portion (Fig. 1, item 3) such that an image of the rearward display portion is visible.

13. TANIGUCHI fails to teach of a vehicle mounted display system.

14. MIZUNO teaches of a vehicle mounted display system in section [0004].

15. It would have been obvious to one with ordinary skill in the art at the time the invention was made to mount the display system of TANIGUCHI in a vehicle and that the transmission type display portion being operable to display in varied states including an opaque state and a transparent state as taught by MIZUNO in order to prevent useful information from being obstructed by an operation guide screen (see MIZUNO: Abstract).

16. TANIGUCHI fails to teach that the touch panel is able to display images.

17. ERICSSON teaches that the touch panel (Fig. 4, item 30) is able to display images (column 4, lines 40-43).

18. It would have been obvious to one with ordinary skill in the art at the time the invention was made to replace the touch panel of TANIGUCHI with the touch panel with displayed images of ERICSSON in order to allow for simultaneous input and display of textual information (see ERICSSON: column 1, lines 53-55).

19. **As for claims 37-39, 59...**As for **claim 37**, TANIGUCHI teaches that the transmission type display portion (Fig. 1, item 2) comprises a surface with a touch panel (Fig. 1, item 2) element thereon; **As for claim 38**, TANIGUCHI teaches that the transmission type display portion (Fig. 1, item 2) comprises an internal touch panel (Fig. 1, item 2) element; **As for claims 39, 59**, TANIGUCHI teaches that the transmission type display portion (Fig. 1, item 2) includes

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a touch panel (Fig. 1, item 2) such that a display of the rearward display portion (Fig. 1, item 3) is changed depending on a touched position on the touch panel (Fig. 1, item 2) in sections [0008, 0011].

20. **As for claims 40-42, 60-62...**As for claims 40, 60, TANIGUCHI teaches that the touched position is in the form of a button (Fig. 3, item 2); **As for claims 41, 61**, TANIGUCHI teaches that the button is displayed in a position which does not prevent view of the rearward display portion (Fig. 1, item 3) through the transmission type display apparatus; **As for claims 42, 62**, TANIGUCHI teaches that the transmission type display portion (Fig. 1, item 2) includes a touch panel (Fig. 1, item 2) and the control portion is operable to control the rearward display portion (Fig. 1, item 3) such that a pointer is displayed by the rearward display portion in accordance with operation of the touch panel (Fig. 1, item 2) in section [0026].

21. **As for claims 43, 63, 68**, TANIGUCHI fails to teach of an approach detecting portion operable to **detect approach** of an operation object, wherein the control portion is operable to change an image displayed on at least one of the transmission type display portion and the rearward display portion when the approach detecting portion detects the approach of the operation object.

22. MIZUNO teaches of an approach detecting portion (MIZUNO, Fig. 1, items 41, 42) operable to **detect approach** of an operation object wherein the control portion (MIZUNO, Fig. 1, item 5) is operable to change an image displayed on a display when the detecting portion detects the approach of an operation object in section [0013].

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23. It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate into the display system of TANIGUCHI a method to detect approach as taught by MIZUNO in order to make actuation easy (see MIZUNO: section [0002]).

24. **As for claims 44, 64**, TANIGUCHI as modified by MIZUNO teaches that the approach detecting portion (MIZUNO, Fig. 1, items 41, 42) can detect an approach direction of the operation object in MIZUNO: section [0013].

25. **As for claims 45, 65**, TANIGUCHI as modified by MIZUNO teaches that the approach detecting portion (MIZUNO, Fig. 1, items 41, 42) is operable to detect whether the operation object approaches from a direction from a passenger's seat or a direction from a driver's seat in MIZUNO section [0016].

26. **As for claim 47**, TANIGUCHI as modified by MIZUNO and ERICSSON above, teaches that the transmission type display portion (TANIGUCHI: Fig. 1, item 2) covers the rearward display portion (TANIGUCHI: Fig. 1, item 3) such that the rearward display portion is visible (TANIGUCHI: in section [0029]) (ERICSSON: Fig. 4, column 4, lines 40-43).

27. **As for claim 48**, TANIGUCHI as modified by MIZUNO fails to teach that the vehicle mounted display apparatus (Fig. 1) is located in a middle portion ***between a passenger's seat and a driver's seat.***

28. Examiner takes official note that it is well known to provide a display apparatus in a middle portion between a passenger's seat and a driver's seat.

29. It would have been obvious to one with ordinary skill in the art at the time the invention was made to position the display apparatus of TANIGUCHI as modified by MIZUNO in the middle portion between the passenger and driver's seat so that it is positioned in a location where both the driver and the passenger have access to the display.

30. As for claim 49, TANIGUCHI teaches that the control portion (Fig. 1, item 4) is operable to selectively display an operation switch on the transmission type display portion (Fig. 1, item 2, section [0011]).

31. As for claim 50, TANIGUCHI as modified by MIZUNO fails to teach that the transmission type display portion (Fig. 1, item 2) has a curved plate shape and an inclination angle with respect to a floor surface of the vehicle that is larger at a lower portion of the transmission type display portion (Fig. 1, item 2) than at an upper portion of the transmission type display portion (Fig. 1, item 2).

32. Applicant has not disclosed any specific advantage or criticality to having the transmission type display portion (Fig. 1, item 2) has a curved plate shape and an inclination angle with respect to a floor surface of the vehicle that is larger at a lower portion of the transmission type display portion (Fig. 1, item 2) than at an upper portion of the transmission type display portion (Fig. 1, item 2). As such, the arrangement is an obvious matter of design choice.

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33. It would have been obvious to one with ordinary skill in the art at the time the invention was made to employ the use of any such configuration, including the one claimed, since any configuration would perform equally well at arranging the displays so that the driver and the passenger can access them.

34. **As for claim 52**, TANIGUCHI teaches that the transmission type display portion (Fig. 1, item 2) comprises an organic electro luminescent layer in section [0006] and the rearward display portion (Fig. 1, item 3) comprises a liquid crystal display apparatus in section [0008].

35. **As for claim 54**, TANIGUCHI as modified by MIZUNO and ERICSSON teaches that a portion of the transmission type display portion (TANIGUCHI: Fig. 1, item 2) is transparent so that the rearward display portion can be seen there through in (TANIGUCHI: section [0026]) (ERICSSON: Fig. 4, column 4, lines 40-43).

36. **As for claim 55**, TANIGUCHI teaches that the control portion (Fig. 1, item 4) is operable to control the transmission type display portion (Fig. 1, item 2) to cause operation switches to appear or disappear gradually on the transmission type display portion (Fig. 1, item 2 section [0011]).

37. **As for claim 56**, TANIGUCHI fails to teach that the control portion is operable to control the transmission type display portion to be selectively opaque so that the rearward display portion cannot be seen.

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38. MIZUNO teaches that the control portion (Fig. 1, item 5) is operable to control the transmission type display portion to be selectively opaque so that the rearward display portion cannot be seen (section [0013]).

39. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include a control portion that is able to cause the display to be selectively opaque as taught by MIZUNO with the display unit of TANIGUSHI in order to prevent useful information from being obstructed (see MIZUNO, Abstract).

40. As for claim 57, TANIGUCHI as modified by MIZUNO teaches that the transmission type display portion (TANIGUCHI, Fig. 1, item 2) has one end pivotally connected to the vehicle as a supporting point therefor in MIZUNO section [0004].

41. As for claim 67, TANIGUCHI teaches that the display control portion is operable to control the rearward display portion (Fig. 1, item 3).

42. TANIGUCHI as modified by MIZUNO and ERICSSON fails to teach of a pointer so that the pointer is in a position corresponding to the touched position when the touch detecting portion detects a position touched by an operator.

43. Examiner takes official notice that it is well known in the field to have a pointer so that the pointer is in a position corresponding to the touched position when the touch detecting portion detects a position touched by an operator.

44. It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine include a pointer with the display apparatus of TANIGUCHI, MIZUNO, and ERICSSON in order to help the user visualize where he currently located on the screen.

45. **As for claim 69**, TANIGUCHI as modified by MIZUNO teaches that the approach detecting portion (MIZUNO, Fig. 1, item 41, 42) is operable to detect a direction of approach the operation object, and the display control portion (TANIGUCHI, Fig. 1, item 5) is operable to switch images to be displayed in at least one of the transmission type display portion (TANIGUCHI, Fig. 1, item 2) and the rearward display portion (TANIGUCHI, Fig. 1, item 3) based on the direction of approach of the operation object detected by the approach detecting portion (MIZUNO, Fig. 1, items 41, 42) in MIZUNO sections [0013, 0016].

46. Claims 46, 51, 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over TANIGUCHI (Japanese Publication No: 2000-331557) in view of MIZUNO (Japanese Publication No: 2000-329577) and STORM (US Patent No: 6,527,555 B1).

47. **As for claim 46**, TANIGUCHI, MIZUNO and ERICSSON fails to teach that the transmission type display portion has a curved surface.

48. STORM teaches that the transmission type display portion (STORM, Fig. 1, item 16) has a curved surface in Fig. 1 and in column 3, lines 21-25.

49. It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the curved surface of STORM with the display apparatus of TANIGUCHI,

MIZUNO and ERICSSON in order to provide a display of information in three-dimensional space (STORM: column 1, lines 50-54).

50. As for claim 51, TANIGUCHI, MIZUNO and ERICSSON fails to teach that the transmission type display portion has a curved plate shape and the rearward display portion has a flat plate shape.

51. STORM teaches that the transmission type display portion (STORM, Fig. 1, item 16) has a curved plate shape and the rearward display portion has a flat plate shape (STORM, Fig. 1, item 18) in Fig. 1 and in column 3, lines 21-25.

52. It would have been obvious to one with ordinary skill in the art at the time the invention was made to specify that the transmission and rearward type display portion as taught by TANIGUCHI, MIZUNO and ERICSSON has a curved plate shape and a flat plate shape (respectively) as taught by STORM in order to provide a display of information in three-dimensional space (STORM: column 1, lines 50-54).

53. As for claim 53, TANIGUCHI, MIZUNO and ERICSSON fails to teach of a display area of the transmission type display portion is larger than that of the rearward display portion.

54. STORM teaches of a display area of the transmission type display portion is larger than that of the rearward display portion in Fig. 1.

55. It would have been obvious to one with ordinary skill in the art at the time the invention was made to specify that the transmission as taught by TANIGUCHI, MIZUNO and ERICSSON is larger than that of the rearward type display portion has a curved plate shape as taught by

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STORM in order to provide a display of information in three-dimensional space (STORM:
column 1, lines 50-54).

Response to Arguments

56. Applicant's arguments filed 31 August 2007 have been fully considered but they are not persuasive.

57. **In regards to independent claims 36, 58, 66,** Applicant argues that *"Taniguchi reference teaches a transparent touch panel capable of transmitting light there though... but does not disclose or suggest a transmission type display portion, having a touch panel function, capable of displaying images (Remarks 10)."* This argument is not persuasive, in light of the introduction of Ericsson (US Patent No: 6,130,665). Ericsson teaches of a transparent touch panel (Fig. 4, item 30) capable of transmitting light there and of displaying images (column 4, lines 40-43). Taniguchi as modified by Ericsson above meets all of the claim limitations as currently stated.

Conclusion

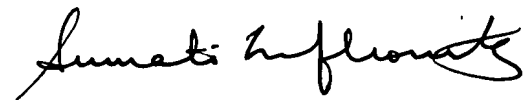
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy Pham whose telephone number is (571) 272-7773. The examiner can normally be reached on 8:00-5:30 (Ton-Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TP
26 October 2007


Tammy Pham
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